

REMARKS

We are in receipt of the Office Action dated July 5, 2001, and the above amendment and following remarks are made in light thereof.

Claims 1-39 are pending in the application, with claims 13-18 and 25-27 having been withdrawn pursuant to the restriction requirement of March 19, 2001. In the Office Action, claims 1-12, 19-24 and 28-39 stand rejected under variously, 35 U.S.C. 102 or 35 U.S.C. 103. Specifically, claims 1, 3-5, 7, 9-11, 19, 21-23, 28 and 30-32 are rejected under 35 U.S.C. 102 as being anticipated by Yamazaki 5,990,542; the same claims are rejected under 35 U.S.C. 102 as being anticipated by Ohtani et al. 5,923,962; claims 1-12, 19-24, and 28-39 are rejected under 35 U.S.C. 103 as being unpatentable over Yoon 5,977,580 in view of Yamazaki; and claims 2, 6, 8, 12, 20, 24, 29, and 33 stand rejected under 35 U.S.C. 103 as being unpatentable over Yamazaki.

In response to these rejections, applicant has amended the independent claims to recite a second insulating film formed over a second conductive (or metallic) layer, and a pixel electrode connected to the second conductive layer through a contact hole provided in the second insulating film.

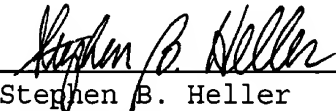
While Yamazaki discloses conductive layers 117 and 121, conductive layer 121 appears to correspond to the pixel electrode.

Consequently, there is no conductive layer in Yamazaki corresponding to the second conductive layer called for in the claims of the present application. Accordingly, the claims are believed to distinguish over Yamazaki. Similarly, the recitation of the second conductive layer also distinguishes the claims over Ohtani et al. and a combination of Yoon and Yamazaki.

The Examiner has also requested that a new title be provided that is descriptive of the invention. Applicant believes that the new title set forth above meets the Examiner's requirement.

Applicant respectfully submits that the present application is now in condition for allowance, and an early Office Action in this regard is earnestly solicited.

Respectfully submitted,



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Ohtani et al.)
)
Serial No.: 09/535,836)
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Filed: March 28, 2000)
)
For: Semiconductor Device)
 and the Fabricating)
 Method Thereof)
)
Art Group: 2811)
)
Examiner: H. Vu)

Commissioner for Patents
Washington, D.C. 20231

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claims 1, 7, 19, 28 and 34 as follows:

1. (Amended) A semiconductor device comprising:

[an inter-layer] a first insulating film comprising an organic
material formed over a conductive layer;

a first metallic layer formed on said [inter-layer] first
insulating film; [and]

a second metallic layer formed on said first metallic
layer[,];

a second insulating film formed on said second metallic layer;
and

a pixel electrode formed on said second insulating film, said pixel electrode being connected to said second metallic layer through a contact hole provided in said second insulating film,

wherein said conductive layer and said second metallic layer are connected to each other at the bottom of a contact hole provided in said [inter-layer] first insulating film.

7. (Amended) A semiconductor device comprising:

[an inter-layer] a first insulating film comprising an organic material formed over a thin film transistor;

a first metallic layer formed on said [inter-layer] first insulating film; [and]

a second metallic layer formed on said first metallic layer[,];

a second insulating film formed on said second metallic layer;
and

a pixel electrode formed on said second insulating film, said pixel electrode being connected to said second metallic layer through a contact hole provided in said second insulating film,

wherein a source region or a drain region of said thin film transistor and said second metallic layer are connected to each other at the bottom of a contact hole provided in said [inter-layer] first insulating film.

19. (Amended) A semiconductor device comprising:

[an inter-layer] a first insulating film comprising an organic material formed over a thin film transistor;

a first conductive layer formed on said [inter-layer] first insulating film; [and]

a second conductive layer formed on said first conductive layer[,];

a second insulating film formed on said second conductive layer; and

a pixel electrode formed on said second insulating film, said pixel electrode being connected to said second conductive layer through a contact hole provided in said second insulating film,

wherein a source region or a drain region and said second conductive layer are connected to each other at the bottom of a contact hole provided in said [inter-layer] first insulating film,

wherein said second conductive layer is contact with said [inter-layer] first insulating film inside of said contact holes.

28. (Amended) A semiconductor device comprising:

a thin film transistor formed over a substrate, said thin film transistor having a semiconductor layer and a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed there between;

[an inter-layer] a first insulating film comprising an organic material formed over said thin film transistor;

a first conductive layer formed on said [inter-layer] first insulating film; [and]

a second conductive layer formed on said first conductive layer[,];

a second insulating film formed on said second conductive layer; and

a pixel electrode formed on said second insulating film, said pixel electrode being connected to said second conductive layer through a contact hole provided in said second insulating film,

wherein said second conductive layer is connected to said semiconductor layer through a contact hole provided in said [inter-layer] first insulating film.

34. (Amended) A semiconductor device comprising:

a thin film transistor formed over a substrate, said thin film transistor having a semiconductor layer and a gate electrode adjacent to said semiconductor layer with a gate insulating film interposed therebetween;

[an inter-layer] a first insulating film comprising an organic material formed over said thin film transistor;

a first conductive layer formed on said [inter-layer] first insulating film; [and]

a second conductive layer formed on said first conductive layer[,];

a second insulating film formed on said second conductive layer; and

a pixel electrode formed on said second insulating film, said pixel electrode being connected to said second conductive layer through a contact hole provided in said second insulating film,

wherein said second conductive layer is connected to said semiconductor layer through a contact hole provided in said first conductive layer and said [inter-layer] first insulating film.